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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,744	04/09/2004	Shigehiro Shiozaki	251487US	8782
22850	7590	04/27/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EDGAR, RICHARD A	
			ART UNIT	PAPER NUMBER
			3745	

DATE MAILED: 04/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/820,744	SHIOZAKI ET AL.	
	Examiner Richard Edgar	Art Unit 3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 09 April 2004 under 37 C.F.R. § 1.53 (b).

2a)  This action is FINAL.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-11 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-6,8,9 and 11 is/are rejected.

7)  Claim(s) 7 and 10 is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 09 April 2004 is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. 09/189,413.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_ .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

Claim 6 is objected to because of the following informalities: The examiner suggests inserting -- assembly -- after "A gas turbine stationary blade" in claim 6, line 1, since the claim further goes on to recite features of an assembly rather than a single blade. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3, 4, 8 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 3, 4, 8 and 9 each recites the limitation "the widened flow passage" in line 2. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 4,127,358 (Parkes hereinafter) in view of United States Patent No. 3,986,789 (Pask hereinafter).

Parkes teaches turbine vane shrouds (col. 3, lines 5-8) with a cooling air passage 26 in communication with the airfoil, wherein the passage 26 extends to the corner section of a front edge of the shroud and then rearward therefrom (see Fig. 3). Parkes also show the other front corner with a cooling passage 27, and then extending rearwardly therefrom. Both side edges of the shrouds have flow passages extending there along (see Fig. 3).

Parkes does not show adjacent shrouds having bolt joints.

Pask teaches adjacent turbine shrouds 18 (see col. 3, lines 33-35) being assembled with a strip 29 fixed in grooves 27,28 along bolt joints (see Fig. 3) for the purpose of providing a seal for the combustion gas flow through the turbine section of the engine.

Since Parkes show turbine stator shrouds being cooled and Pask teach that adjacent stator shrouds should be sealed using a strip placed in grooves along bolt joints, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the side edges of the Parkes shrouds to have bolt joints and grooves, as taught by Pask, for the purpose of providing a seal for the combustion gas flow through the turbine section of the engine.

***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 2, 3, 4, 5 and 6 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3, 4, 5, 6 and 7, respectively, of U.S. Patent No. 6,783,323 in view of United States Patent No. 3,986,789 (Pask hereinafter).

Although the claims are not identical, there are not patentably distinct from one another. The application claims are broader in at least one aspect and also recite additional features not claimed in the patent claims.

Regarding the broadening aspect of the application claims, the regulating plate of patent claims 1 and 7 has been excluded in the presentation of the application claims. Thus, it is apparent that the more specific patent claims 1 and 7 encompass application claims 1 and 6, respectfully. Following the rationale in *In re Goodman*, cited above, where applicant has once been granted a patent containing a claim for the specific or narrower invention, applicant may not then obtain a second patent with a claim for the

generic or broader invention without first submitting an appropriate terminal disclaimer.

Note that since application claims 1 and 6 are anticipated by patent claims 1 and 7, respectfully, and since anticipation is the epitome of obviousness, then application claims 1 and 6 are obvious over patent claims 1 and 7, respectfully.

With respect to the additional features recited in the application claims, the inclusion of the side end faces of adjacent inner shrouds connected along a bolt joint is a non-obvious improvement in view of United States Patent No. 3,986,789 (Pask).

Pask teaches adjacent turbine shrouds 18 (see col. 3, lines 33-35) being assembled with a strip 29 fixed in grooves 27,28 along bolt joints (see Fig. 3) for the purpose of providing a seal for the combustion gas flow through the turbine section of the engine.

Since the patent claims recite turbine stator shrouds being cooled and Pask teach that adjacent stator shrouds should be sealed using a strip placed in grooves along bolt joints, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the side edges of the patent claim shrouds to have bolt joints and grooves, as taught by Pask, for the purpose of providing a seal for the combustion gas flow through the turbine section of the engine.

The above double patenting rejection is not prohibited under 35 U.S.C. § 121 since the claims of the application and patent are not consonant with the restriction requirement made by the examiner. For example, the species of Figures 6-13 do not show a flow passage introduced to a corner section on the side of a front edge of the inner shroud (claim 1) or a flow passage that communicates with the discharge port and

extends in the corner section and along the second side edge toward the second edge (claim 6). Therefore, the line of demarcation between the distinct inventions identified by the examiner has not been maintained with the presentation of the instant application claims. See MPEP § 804.01.

***Allowable Subject Matter***

Claims 7 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 8 and 9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Edgar whose telephone number is (571) 272-4816. The examiner can normally be reached on Mon.-Thur. and alternate Fri., 7 am- 5 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Richard Edgar  
Examiner  
Art Unit 3745

RE



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4/23/05